

**WHAT IS CLAIMED IS:**

- 1        1. An implantable sensor apparatus for taking readings from a patient in vivo, the  
2 sensor apparatus comprising:
  - 3            an implantable sensor having a distal end with a sensor tip for direct contact with patient  
4 fluids;
  - 5            a flush sleeve directed towards the sensor tip; and
  - 6            a fluid conduit in fluid communication with the flush sleeve, wherein a fluid received in  
7 the fluid conduit in fluid communication with the flush sleeve is used to spray the sensor tip.
- 1        2. The sensor apparatus of claim 1, further comprising a connector fitting for  
2 supporting the implantable sensor within the patient.
- 1        3. The sensor apparatus of claim 1, wherein the fluid conduit contains a septum, and  
2 wherein a needle is used to pierce the septum to inject the fluid into the fluid conduit.
- 1        4. The sensor apparatus of claim 1, wherein the flush sleeve surrounds the  
2 implantable sensor in a tight fit connection.
- 1        5. The sensor apparatus of claim 4, wherein the flush sleeve contains at least one  
2 one-way valve near the sensor tip.
- 1        6. The sensor apparatus of claim 1, wherein the fluid conduit is located at a proximal  
2 end of the sensor.
- 1        7. The sensor apparatus of claim 6, wherein the proximal end of the sensor is  
2 covered by a protector sleeve.
- 1        8. The sensor apparatus of claim 1, wherein the sensor is plugged into the connector  
2 fitting, and the connector fitting is affixed internally to the patient.

1       9.     The sensor apparatus of claim 1, wherein the fluid is a saline solution.

1       10.    The sensor apparatus of claim 1, wherein the fluid contains an anti-coagulant.

1       11.    The sensor apparatus of claim 1, wherein the connector fitting is connected to a  
2     telemetry unit to transmit readings from the implantable sensor.

1       12.    A method of cleaning a sensor tip of an implantable electrode sensor having the  
2     sensor tip in direct contact with patient fluid, the method comprising the steps of:  
3              injecting fluid into a first end of a flush sleeve surrounding the sensor; and  
4              spraying off the sensor tip with the injected fluid through at least one orifice located at a  
5     second end of the flush sleeve.

1       13.    The method of claim 12, wherein the first end of the flush sleeve contains a fluid  
2     conduit and a septum, and wherein a needle is used to pierce the septum to inject the fluid into  
3     the fluid conduit.

1       14.    The method of claim 12, wherein the flush sleeve surrounds the implantable  
2     sensor in a tight fit connection.

1       15.    The method of claim 14, wherein the flush sleeve contains at least one one-way  
2     valve near the sensor tip.

1       16.    The method of claim 14, wherein the portion of the sensor in contact with the first  
2     end of the flush sleeve is covered by a protector sleeve.

1       17.    The method of claim 12, wherein the sensor is plugged into a connector fitting,  
2     and the connector fitting is affixed internally to the patient.

- 1        18. The method of claim 11, wherein the fluid is a saline solution.
- 1        19. The method of claim 11, wherein the fluid contains an anti-coagulant.
- 1        20. A system for cleaning a sensor tip of an implantable electrode sensor having the  
2        sensor tip in direct contact with patient fluid, the system comprising:  
3              means for injecting fluid into a first end of a flush sleeve surrounding the sensor; and  
4              means for spraying off the sensor tip with the injected fluid through at least one orifice  
5        located at a second end of the flush sleeve.